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NOTICE OF ALLOWANCE AND FEE(S) DUE

25776 7590 07/23/2004

ERNEST A. BEUTLER, ATTORNEY AT LAW
10 RUE MARSEILLE
NEWPORT BEACH, CA 92660

EXAMINER

AVERY, BRIDGET D

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 07/23/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,555	03/12/2002	Nobuyuki Kanno	FY 16755PCTUS	4606

TITLE OF INVENTION: CARE TYPE ELECTRIC WHEELCHAIR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	10/25/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail**

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

25776 7590 07/23/2004

**ERNEST A. BEUTLER, ATTORNEY AT LAW
10 RUE MARSEILLE
NEWPORT BEACH, CA 92660**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,555	03/12/2002	Nobuyuki Kanno	FY 16755PCTUS	4606

TITLE OF INVENTION: CARE TYPE ELECTRIC WHEELCHAIR

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nonprovisional	NO	\$1330	\$300	\$1630	10/25/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
AVERY, BRIDGET D	3618	180-065100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is not claiming SMALL ENTITY status. See, e.g., 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

(Authorized Signature)

(Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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10/009,555	03/12/2002	Nobuyuki Kanno	FY 16755PCTUS	4606
25776	7590	07/23/2004	EXAMINER	
ERNEST A. BEUTLER, ATTORNEY AT LAW 10 RUE MARSEILLE NEWPORT BEACH, CA 92660			AVERY, BRIDGET D	
			ART UNIT	PAPER NUMBER
			3618	
DATE MAILED: 07/23/2004				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 147 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 147 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No.

10/009,555

Examiner

Bridget Avery

Applicant(s)

KANNO ET AL.

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/16/04.
2. ☒ The allowed claim(s) is/are 1-16,24 and 25.
3. ☒ The drawings filed on 10/26/01 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

BRIDGET AVERY
PATENT EXAMINER

7/14/04

CHRISTOPHER D. FELIC
SENIOR PATENT EXAMINER
TECHNOLOGY CENTER 3600

SEARCH			
Class	Sub.	Date	Exmr.
180	19.1	9/22/03	BA
~	19.2	~	~
~	19.3	~	~
~	65.1	~	~
~	65.2	~	~
~	65.5	~	~
~	65.8	~	~
~	907	~	~
search	updated	3/11/04	BA
280	280.1	~	~
~	304.1	~	~
701	22	~	~
~	41	~	~
~	42	~	~
~	43	~	~
search	updated	7/14/04	BA

(List databases searched. Attach search strategy inside.)

	Date	Exmr.
For Gary Chis	3/08/07	BA

Best Available Copy

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.
180	65.1	7/14/04	BA
2	907	2	2
2	19.3	2	2

Class	Sub.	Date	Exmr.
180	65.1	7/14/04	BA
2	907	2	2
2	19.3	2	2

FY16755PCT

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JUN 16 2004

In re Application

Nobuyuki, Kanno

Mitsuo, Miyazaki

App. No.: 10/009555

Filed: October 26, 2001

Conf. No.: 4606

Title: NURSING TYPE OF ELECTRIC
MOTOR-OPERATED
WHEELCHAIR

Examiner: B. Avery

Art Unit: 3618

I hereby certify that this correspondence and all
marked attachments are being deposited with
the United States Patent Office via fax to
(703) 872-9327 on:

June 16, 2004

Ernest A. Beutler
Reg. No. 19901

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

PROPOSED AMENDMENT AFTER FINAL

Dear Sir:

In response to the Final Office Action, dated March 23, 2004 and the telephone interview with the Examiner on June 16, 2004, entry of the following amendment, as placing this case in obvious condition for allowance or better form for appeal, is most respectfully requested:

Entry
Recommended
PA
7/14/04

App. No.: 10/009555
Filed: October 26, 2001
Conf. No. 4606

Page 2 of 5

Entry
Recommended
PA
7/14/04

IN THE CLAIMS

1. (Currently Amended) A pushing, electric motor-operated wheelchair, a frame provided with a seat for a patient, at least one wheel journaled by said frame and driven by an electric motor carried by said frame, a bar handle extending upward from a rearward portion of said frame and having a cross piece of a double member structure consisting of a fixed member attached to and extending transversely across said frame and an external member disposed along at least a substantial portion of the length of an upper side portion of said fixed member and supported for limited movement relative thereto and to which an assistant applies a force to move said wheelchair; a detecting means interposed between said fixed member and said external member to detect control information based on an external force applied by the assistant to said external member to move said wheelchair, and a control for controlling said electric motor to produce assisting power commensurate with the control information detected by said detecting means.

2. (Previously Amended) A pushing, electric motor-operated wheelchair according to claim 1, wherein the detecting means detects relative displacement between the fixed member and the external member, and the control controls the electric motor to produce assisting power commensurate with the detected displacement.

3. (Previously Amended) A pushing, electric motor-operated wheelchair according to claim 2, wherein the displacement detecting means is disposed in the center, with respect to the wheelchair width, of at least one of the fixed member and the external member, and guides are provided on right and left sides of said displacement detecting means to restrict up and down movements and to permit forward and reverse movements of said external member relative to said fixed member.

4. (Previously Amended) A pushing, electric motor-operated wheelchair according to claim 2 wherein the displacement detecting means is disposed in the center, with respect to the wheelchair width, of at least one of the fixed member and the external member, and grip members are provided on right and left sides of said external member.

5. (Previously Amended) A pushing, electric motor-operated wheelchair according to claim 4, wherein the right and left grip members are positioned symmetrically apart from the longitudinal centerline of the wheelchair and sloping obliquely up inward to the center in the wheelchair width direction from right and left ends.

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can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line 11); and

if the position or the size of the shared application window has changed, determining a new position and/or a new size of the shared application window (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter,

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breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56.)

12. As to claim 7, Salesky teaches the method of claim 1 further comprising:

periodically capturing the image corresponding to the shared application window (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

13. As to claim 8, Salesky teaches the method of claim 7 further comprising:

periodically transmitting the captured image to the viewer (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

14. As to claim 9, Salesky teaches a computer-readable storage medium storing a computer program executable by a computer, the computer program comprising computer instructions for:

determining a position and a size of a shared application window by monitoring function calls made by the application (the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the

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presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44); and capturing a screen shot of an image corresponding to the shared application window (In a video conferencing system, a snap-shot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34).

15. As to claim 10, Salesky teaches the computer readable storage medium of claim 9 further comprising computer instructions for:

transmitting the position and the size of the shared application window to a viewer (Existing systems that capture graphics display commands, transmit them, then use them to recreate the original display appear to have great compression, which entails economy of network transmission, col. 10, lines, 29 – 45).

16. As to claim 11, Salesky teaches the computer readable storage medium of claim 9 further comprising computer instructions for:

transmitting the screen shot to a viewer (In a video conferencing system, a snap-shot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34.)

17. As to claim 12, Salesky teaches the computer readable storage medium of claim 9 further comprising computer instructions for:

determining a position and a size of a non-shared application window by monitoring function calls made by the non-shared application (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a

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rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line11); and

if the non-shared application window overlaps the shared application window, determining a position and a size of an overlapping region (the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44, These and other features apply to other data streams shared in the conference or in meetings where there is no shared-image data stream, abstract.)

18. As to claim 13, Salesky teaches the computer readable storage medium of claim 12 further comprising computer instructions for:

transmitting the overlapping region to a viewer (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap col. 10, lines 46-52.)

19. As to claim 14, Salesky teaches the computer readable storage medium of claim 9 further comprising computer instructions for:

determining whether the position or the size of the shared application window has changed by monitoring function calls made by the shared application (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and

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multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line 11); and

if the position or the size of the shared application window has changed, determining a new position and/or a new size of the shared application window (During a

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conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56),

20. As to claim 15, Salesky teaches the computer readable storage medium of claim 9 further comprising computer instructions for:

periodically capturing the image corresponding to the shared application window (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

21. As to claim 16, Salesky teaches the computer readable storage medium of claim 15 further comprising computer instructions for:

periodically transmitting the captured image to the viewer (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

22. As to claim 17, Salesky teaches a data conferencing system comprising:
a presenter computer connected to one or more server computers via a global area network;
a viewer computer connected to the one or more server computers via the global area computer network; and

a computer program executable by the presenter computer, wherein the computer program comprises computer instructions for:

determining a position and a size of a shared application window by monitoring function calls made by the application (the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44); and

capturing a screen shot of an image corresponding to the shared application window (In a video conferencing system, a snap-shot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34).

23. As to claim 18, Salesky teaches the data conferencing system of claim 17 further comprising computer instructions for:

transmitting the position and the size of the shared application window to a viewer (Existing systems that capture graphics display commands, transmit them, then use them to recreate the original display appear to have great compression, which entails economy of network transmission, col. 10, lines, 29 – 45).

24. As to claim 19, Salesky teaches the data conferencing system of claim 17 further comprising computer instructions for:

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transmitting the screen shot to a viewer (In a video conferencing system, a snapshot of the conference presentation is taken at regular intervals, such as thirty times per second, col. 1, lines 18 – 34.)

25. As to claim 20, Salesky teaches the data conferencing system of claim 17 further comprising computer instructions for:

determining a position and a size of a non-shared application window by monitoring function calls made by the non-shared application (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller,

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the blocks are changed to be made up of smaller rectangles, or the capture rectangle is divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line11); and if the non-shared application window overlaps the shared application window, determining a position and a size of an overlapping region (the position of a pointer icon on a conferee's view of the captured region and an icon specified by the conferee might be communicated to each of the other attendee and presenter clients, so that each of the participants can see what each conferee is pointing at should a conferee choose to point to an element of the shared captured region, col. 2, lines 28 – 54, Color map changes can occur on the presenter client display system as the presenter opens, makes changes in, or closes a program, either in a window that overlaps the capture rectangle or in a window beyond the capture rectangle used for his or her own private work, col. 15, line 36 – 44, These and other features apply to other data streams shared in the conference or in meetings where there is no shared-image data stream, abstract).

26. As to claim 21, Salesky teaches the data conferencing system of claim 20 further comprising computer instructions for:

transmitting the overlapping region to a viewer (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular

area. More than one capture region may be selected at a time and multiple regions may overlap col. 10, lines 46-52.)

27. As to claim 22, Salesky teaches the data conferencing system of claim 17 further comprising computer instructions for:

determining whether the position or the size of the shared application window has changed by monitoring function calls made by the shared application (the presenter selects an area of his or her computer display to be shared ("capture region"); it need not be a rectangular area. More than one capture region may be selected at a time and multiple regions may overlap. The selection may be made on a screen display, in a memory representation of a display, or in an aliased representation of either; the selection can be changed at any time. If the client has multiple monitors or multiple displays on a single monitor, independent selection can be made for each. A window provided by the presenter client computer's operating system, or by an application or other program, may be designated as the capture region, and then the capture region can be adjusted automatically if the window is moved or resized. This may be a fixed window, or the capture operation can be set to follow the selection of the current ("top" or "focus") window automatically. In a simple embodiment, the presenter selects a rectangular region on the screen ("capture rectangle"). For efficient transmission, the capture rectangle is broken up into rectangular subregions (blocks) to give good perception of response time. For example, if the presenter has selected all of an 800-by-600-pixel screen display to be within the capture rectangle, then it might be broken up into twelve 200-by-200-pixel square blocks. If the capture rectangle is later adjusted to be smaller, the blocks are changed to be made up of smaller rectangles, or the capture rectangle is

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divided-into fewer blocks, or both; correspondingly, if the capture rectangle is later adjusted to be larger, the blocks are changed to be larger rectangles or the capture rectangle is divided into more blocks, or both. For efficient handling of blocks, the blocks are preferably kept between 1000 and 4000 pixels in size. As the blocks are updated on the attendee's screen, they are presented from the top row to the bottom row and from left to right within a row, col. 10, line 46 – col. 11, line11); and

if the position or the size of the shared application window has changed, determining a new position and/or a new size of the shared application window (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56),

28. As to claim 23, Salesky teaches the data conferencing system of claim 17 further comprising computer instructions for:

periodically capturing the image corresponding to the shared application window (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

29. As to claim 24, Salesky teaches the data conferencing system of claim 23 further comprising computer instructions for:

periodically transmitting the captured image to the viewer (During a conferencing session, presenter client 12 takes periodic "snap-shots" of the application screen image

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contained within a rectangular boundary determined by the presenter, breaks the screen shot into smaller rectangular blocks, compares these blocks to information from a previous screen shot, col. 7, lines 35 – 56).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 703-605-4362. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on 703-306-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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July 19, 2004, 2004


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